

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1-34. (Cancelled)

1 35. (New) A method for providing object change information from a first
2 system to one or more systems for synchronizing the one or more systems with
3 the first system, the one or more systems having one or more object caches for
4 storing objects, the method comprising the steps of:

5 changing an object in the first system;
6 determining object change information representing a change made to the
7 object in the first system; and
8 distributing the object change information from the first system to one or
9 more systems to cause the one or more systems to merge the object change
10 information into the one or more object caches so as to synchronize the one or
11 more systems with the first system;
12 wherein the objects are included in a database; and
13 wherein one or more of the first system and the one or more systems can
14 perform database operations on a given object within the database.

1 36. (New) The method as claimed in claim 35 further comprising a step of
2 establishing a communication link between the first system and the one or more
3 systems wherein the distributing step distributes the object change information
4 from the first system to the one or more systems through the communication link.

1 37. (New) The method as claimed in claim 36 wherein the establishing
2 step establishes the communication link based on a publish/subscribe protocol.

1 38. (New) The method as claimed in claim 35 further comprising a step of
2 registering the one or more systems in the first system prior to the distributing
3 step wherein the distributing step distributes the object change information to the
4 registered one or more systems.

1 39. (New) The method as claimed in claim 35 further comprising a step of
2 sending the object change information to the database for updating the object in
3 the database with the object change information.

1 40. (New) The method as claimed in claim 39 further comprising the steps
2 of:
3 receiving an error message from the database when the updating of the
4 object in the database fails; and
5 discarding the object change information prior to the distributing step in
6 response to the error message.

1 41. (New) The method as claimed in claim 35 wherein the first system
2 includes an object cache for storing one or more objects, and the method further
3 comprises a step of merging the object change information into the object cache
4 of the first system.

1 42. (New) The method as claimed in claim 35 wherein the determining
2 step determines the object change information as a minimal set of information
3 representing the change made to the object.

1 43. (New) The method as claimed in claim 35 wherein the determining
2 step determines the object change information to include a primary key
3 identifying the object.

1 44. (New) The method as claimed in claim 35 wherein the object includes
2 an attribute for containing object data or a value of a relationship with one, or
3 more, other object, and the determining step determines the object change
4 information to include a change made in the attribute of the object.

1 45. (New) The method as claimed in claim 35 wherein the first system
2 includes a cache for storing one or more objects, the method further comprising
3 the steps of:

4 receiving object change information distributed from the one or more
5 systems and containing information of changes made to one or more objects in the
6 one or more systems; and

7 merging the object change information received from the one or more
8 systems into the objects in the cache of the first system to synchronize the first
9 system with the one or more systems.

1 46. (New) A method for providing object change information from a first
2 system to one or more systems for synchronizing the one or more systems with
3 the first system, the first system having a first object cache for storing one or
4 more objects and the one or more systems having one or more object caches for
5 storing one or more objects, the method comprising the steps of:

6 determining object change information representing a change made to an
7 object in the first system; and

8 distributing the object change information from the first system to the one
9 or more systems to cause the one or more systems to merge the object change

10 information into the one or more object caches so as to synchronize the object in
11 the one or more object caches of the one or more systems with the changed object
12 in the first system;
13 wherein the objects are included in a database; and
14 wherein one or more of the first system and the one or more systems can
15 perform database operations on a given object within the database.

1 47. (New) The method as claimed in claim 46 further comprising a step of
2 establishing a communication link between the first system and the one or more
3 systems wherein the distributing step distributes the object change information
4 from the first system to the one or more systems through the communication link.

1 48. (New) The method as claimed in claim 46 further comprising a step of
2 registering the one or more systems in the first system prior to the distributing
3 step wherein the distributing step distributes the object change information to the
4 registered one or more systems.

1 49. (New) The method as claimed in claim 46 further comprising a step of
2 sending the object change information from the first system to the database for
3 updating the object in the database with the object change information.

1 50. (New) The method as claimed in claim 49 further comprising the steps
2 of:
3 receiving an error message from the database when the updating of the
4 object in the database fails; and
5 discarding the object change information prior to the distributing step in
6 response to the error message.

1 51. (New) The method as claimed in claim 46 further comprising a step of
2 merging the object change information into the first object cache of the first
3 system so as to synchronize the object in the first object cache with the changed
4 object in the first system.

1 52. (New) The method as claimed in claim 46 wherein the determining
2 step determines the object change information as a minimal set of information
3 representing the change made to the object.

1 53. (New) The method as claimed in claim 46 wherein the determining
2 step determines the object change information to include a primary key
3 identifying the object and any changed attribute of the object.

1 54. (New) The method as claimed in claim 46 further comprising steps of:
2 receiving object change information distributed from the one or more
3 systems and containing information of changes made to one or more objects in the
4 one or more systems; and
5 merging the object change information received from the one or more
6 systems into the objects in the first cache of the first system to synchronize the
7 first system with the one or more systems.

1 55. (New) Computer readable media storing instructions for use in the
2 execution in a computer of a method for providing object change information
3 from a first system to one or more systems for synchronizing the one or more
4 systems with the first system, the one or more systems having one or more object
5 caches for storing objects, the method comprising the steps of:
6 changing an object in the first system;

7 determining object change information representing change made to the
8 object in the first system; and
9 distributing the object change information from the first system to the one
10 or more systems to cause the one or more systems to merge the object change
11 information into the one or more object caches so as to synchronize the one or
12 more systems with the first system
13 wherein the objects are included in a database; and
14 wherein one or more of the first system and the one or more systems can
15 perform database operations on a given object within the database.